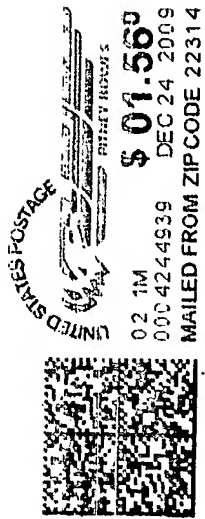


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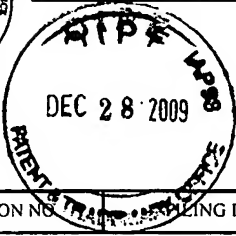
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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,271	05/22/2007	Yusuke Hiraishi	12137-0004	5606
22902 7590 12/24/2009 CLARK & BRODY 1090 VERMONT AVENUE, NW SUITE 250 WASHINGTON, DC 20005			EXAMINER JENNINGS, STEPHANIE M	
			ART UNIT 3725	PAPER NUMBER
			MAIL DATE 12/24/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/584,271	HIRAISHI, YUSUKE	
	Examiner	Art Unit	
	Stephanie Jennings	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :24 June 2009, 09 July 2008, 08 July 2008, 02 November 2007, 23 June 2006.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Litz et al. US Patent No. 3,823,599 in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967. In regard to **claim 1**, Litz discloses a system for supplying lubricant to a pair of disk rolls (10, 13) with a spray nozzle (14) provided at the tip of the plumbing extended to a position near the disk rolls (column 2, lines 6-7). Litz does not disclose a storage tank. In regard to **claim 1**, Japanese Patent Application Publication JP 09292094 teaches an oil tank (7) with an end for discharging oil and a device (8, 9, or 30) for switching flow to the direction to the storage tank. It would have been obvious to one skilled in the art at the time of invention

Art Unit: 3725

to provide Litz's device with a storage tank of JP 09292094 because this allows for extra lubricant to be stored during operation. Litz in view of JP 09292094 does not disclose a device for switching flow direction or a device for releasing pressure in the plumbing. In regard to **claim 1**, Japanese Patent Application Publication JP 10-028902 teaches a device for adjusting the flow of the lubricant. It would have been obvious to one skilled in the art at the time of invention to provide Litz in view of JP 09292094 with the adjusting device because this provides for more efficient lubrication. Litz in view of JP 10-028902 and JP 09292094 does not disclose a device for releasing pressure in the plumbing. In regard to **claim 1**, Japanese Patent Application Publication JP 11035967 A teaches a guide shoe that releases and controls the pressure. It would have been obvious to one skilled in the art at the time of invention to provide the device of Litz in view of JP 10-028902 and JP 09292094 with the pressure controlling apparatus of JP 11035967 A because this prevents a pressure buildup.

4. In regard to **claim 2**, JP 09292094 teaches a disk like rotary member that can be pushed at a variable to rate so that oil lubricant is expelled from the outlet.

5. In regard to **claims 3 and 12**, JP 10-028902 teaches a spray nozzle that can be flexibly configured. The spray nozzles of JP 10-028902 are capable of being moved if the disc rolls move.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A as applied to claim 1 above, and further in view of Jain US Patent No. 6,330,818.

Art Unit: 3725

7. Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A does not disclose a device for cleaning the lubricant piping.
8. In regard to **claim 4**, Jain teaches cleaning of the lubricant piping (column 5, lines 26-30).
9. It would have been obvious to one skilled in the art to provide the device of Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A with the cleaning system of Jain because cleaning the lubricant piping system regularly prevents clogging of the nozzle.
10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A as applied to claim 1 above, and further in view of JP 05214358.
11. Litz in view of JP 10-028902, JP 0929094 and JP 11035967 A does not disclose a device for supplying a solidifier of solidifying the lubricant.
12. In regard to **claim 5**, JP 05214358 teaches blending to obtain 100 parts by weight with one or more solid lubricants with 0-500 parts by weight water dispersion type polymer and 60-350 parts by weight water dissolution type polymer to obtain a lubricant composition. It would have been obvious to one skilled in the art to provide a method of solidification to the lubricant, because a solidified lubricant would be easier to apply to the rolls.
13. Claims 6-8, 10-11, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yorifuji et al. 5,983,689 in view of Japanese Patent Application

Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967.

14. In regard to **claim 6**, Yorifuji discloses a piercing mill with a plug (3), and a pair of disc rolls (2, 2') (column 4, lines 27-35).

15. Yorifuji in view of JP 09292094 does not disclose a device for switching flow direction or a device for releasing pressure in the plumbing or a storage tank. In regard to **claim 6**, Japanese Patent Application Publication JP 09292094 teaches an oil tank (7) with an end for discharging oil and a device (8, 9, or 30) for switching flow to the direction to the storage tank. It would have been obvious to one skilled in the art at the time of invention to provide Yorifuji's device with a storage tank of JP 09292094 because this allows for extra lubricant to be stored during operation.

16. Yorifuji in view of JP 09292094 does not disclose a device for switching flow direction or a device for releasing pressure in the plumbing. In regard to **claim 6**, Japanese Patent Application Publication JP 10-028902 teaches a device for adjusting the flow of the lubricant. It would have been obvious to one skilled in the art at the time of invention to provide Yorifuji in view of JP 09292094 with the adjusting device because this provides for more efficient lubrication. Yorifuji in view of JP 10-028902 and JP 09292094 does not disclose a device for releasing pressure in the plumbing. In regard to **claim 6**, Japanese Patent Application Publication JP 11035967 A teaches a guide shoe that releases and controls the pressure. It would have been obvious to one skilled in the art at the time of invention to provide the device of Yorifuji in view of JP 10-

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028902 and JP 09292094 with the pressure controlling apparatus of JP 11035967 A

because this prevents a pressure buildup.

17. In regard to **claim 7**, JP 10-028902 teaches a spray nozzle with a multiaxial arm (60).

18. In regard to **claims 8 and 10**, Yorifuji discloses a method of manufacturing seamless pipes or tubes by using a piercing mill having a pair of disc rolls while supplying a lubricant to the disc rolls, comprising: supplying the lubricant to the disc rolls during piercing; circulating the lubricant in a plumbing when piercing is not performed; and releasing pressure of the lubricant in the plumbing near a spraying port to the disc rolls and spraying the lubricant from the inlet side of the piercing mill (page 2, lines 63-70).

19. In regard to **claims 11 and 14**, Yorifuji discloses a method for manufacturing a seamless pipe part (column 1, lines 8-14).

20. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yorifuji in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967 as applied to claim 8 above, and further in view of Ginzburg US Patent No. 5,460,023.

21. Yorifuji in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application

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Publication JP 11035967 does not disclose orienting the nozzles at angles of five degrees from a center plane parallel to the disc rolls.

22. In further regard to **claim 9**, Ginzburg teaches determination of an optimum spray angle from 3° to 10° (abstract and column 2, lines 12-21).

23. It would have been obvious to one of ordinary skill in the art to provide the device of Yorifuji in view of Japanese Patent Application Publication JP 10-028902, Japanese Patent Application Publication 09292094, and Japanese Patent Application Publication JP 11035967 with the spray nozzle angular configuration ability of Ginzburg because this allows for comprehensive lubrication application to the disc rolls.

24. In regard to **claim 13**, Yorifuji teaches a method for manufacturing a seamless pipe part (column 1, lines 8-14).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie Jennings whose telephone number is (571) 270-7392. The examiner can normally be reached on Monday-Thursday, 7 am - 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dana Ross can be reached on (571) 272-4480. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. J./
Examiner, Art Unit 3725
December 17, 2009

/Edward Tolan/
Primary Examiner, Art Unit 3725

Receipt date: 10/08/2008
List of citation in
the Argentine Office Action

"2008 - Año de la enseñanza de las Ciencias"

EXAMEN TECNICO DE FONDO		SOLICITUD N°: P050102456	
4. CLASIFICACIÓN			
Int. Cl.: B21B 27/10, 19/04, 45/02			
5. BÚSQUEDA			
Campo de la Búsqueda: B21B			
6. RESULTADO DE LA BÚSQUEDA			
Docu- mento Nro.	Categoría	Documento	Relevante para la(s) Reivindicación(es) N°
/S.J./ 1	X,Y	JP 8216717 A - 27/08/96 - (Doc. Compl.) - Figs. 1 a 8 y Des.	1-5, 6-7, 8-10, 11
/S.J./ 2	X,Y	JP 6015311 A - 25/01/94 - (Doc. Compl.) - Figs. 1 a 6 y Des.	1-5, 6-7, 8-10, 11
/S.J./ 3	Y	AR197881 - 15/05/74 - (Relvs. y Dibs.) - Fig. 2 y Relvs. 1 y 2.	1-5, 6-7, 8-10, 11
CATEGORÍA DE LOS DOCUMENTOS CITADOS			
<p>"X" Documento de particular relevancia si es considerado solo, afecta la Novedad o la Actividad Inventiva.</p> <p>"Y" Documento de particular relevancia combinado con otro(s) de la misma categoría, afecta la Actividad Inventiva.</p> <p>"A" Documento perteneciente al Estado de la Técnica.</p> <p>"D" Documento citado en la solicitud.</p> <p>"B" Documento surgido de las Observaciones de Terceros.</p> <p>"L" Documento citado por otras razones.</p> <p>"S" Solicitud conflictiva (Art. 15 Ley 24.481)</p> <p>"O" Divulgación no escrita.</p> <p>"T" Documento citado para entender el principio o teoría bajo la cual se desarrolla la invención.</p> <p>"&" Documento de la misma familia de patentes.</p>			

previously
cited
previously
cited

Receipt date: 07/08/2008

Partial Translation of Search Report
From Argentine Office Action

	Doc. No.	Category	Document	Relevant for Claims No.
/S.J./	1	X, Y	JP 8215717 A - 27/08/96 - (Whole document) - Figs. 1 to 8 and Des.	1-5, 6-7, 8-10, 11
/S.J./	2	X, Y	JP 6015311 A - 25/01/94 - (Whole document) - Figs. 1 to 6 and Des.	1-5, 6-7, 8-10, 11
/S.J./	3	Y	AR197861 - 15/05/4 (Claims and Figures) -Fig. 2 and Claims 1 and 2	1-5, 6-7, 8-10, 11

/Stephanie Jennings/
12/14/2009

Receipt date: 06/23/2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Yusuke HIRAISHI

Art Unit: not yet assigned

Application No.: not yet assigned

Examiner: not yet assigned

Filed: June 23, 2006

Attorney Dkt. No.: 12137-0004

For: SYSTEM FOR SUPPLYING LUBRICANT, APPARATUS FOR MANUFACTURING
SEAMLESS PIPES OR TUBES, AND METHOD OF MANUFACTURING
SEAMLESS PIPES OR TIBES (as amended)

INFORMATION DISCLOSURE STATEMENT

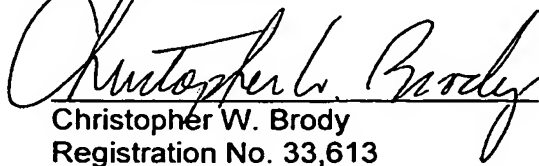
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached form PTO-1449. It is respectfully requested that the references be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

Applicants respectfully submit that this disclosure is being made with the filing of the application therefore no fee is required.

Respectfully submitted,
CLARK & BRODY


Christopher W. Brody
Registration No. 33,613

Customer No. 22902
1090 Vermont Avenue, NW, Suite 250
Washington, DC 20005
Telephone: 202-835-1111
Facsimile: 202-835-1755

Docket No.: 12137-0004
Date: June 23, 2006

Receipt date: 06/24/2009

Sheet 1 of 1



FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>	ATTY. DOCKET NO. 12137-0004	SERIAL NO. 10/584,271
	APPLICANT Yusuke HIRAISHI	
	FILING DATE May 22, 2007	GROUP ART UNIT 3725

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION		
							YES	NO	PART.
/S.J./	1.	62-173013	07/29/1987	JP					X
/S.J./	2.	4-105705	04/07/1992	JP					X
/S.J./	3.	6-292910	10/21/1994	JP					X

OTHER REFERENCES *(Including Author, Title, Date, Pertinent Pages, Etc.)*

EXAMINER	DATE CONSIDERED	
/Stephanie Jennings/	12/14/2009	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT <i>(Use several sheets if necessary)</i>	ATTY. DOCKET NO. 12137-0004	SERIAL NO. Not yet assigned
	APPLICANT Yusuke HIRAISHI	
	FILING DATE 06/23/2006	GROUP ART UNIT Not yet assigned

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION		
							YES	NO	PART.
/S.J./	1.	08-215717	08/27/1996	Japan					x
/S.J./	2.	06-015311	01/25/1994	Japan					x
/S.J./	3.	06-099206	04/12/1994	Japan					x
/S.J./	4.	04-288916	10/14/1992	Japan					x
/S.J./	5.	10-028902	02/03/1998	Japan					x
/S.J./	6.	03-169411	07/23/1991	Japan					x
/S.J./	7.	2641834	05/02/1997	Japan					x

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	8.	"Current Advances in Materials and Processes - Report of the ISIJ Meeting", The Iron and Steel Institute of Japan, Vol. 8, No. 5, 1995, pg. 1218, ISSN 0914-6628	
EXAMINER		/Stephanie Jennings/	DATE CONSIDERED 12/14/2009
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Receipt date: 07/09/2008

Sheet 1 of 1

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

12137-0004

SERIAL NO.

10/584,271

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

APPLICANT

Yusuke HIRAISHI

FILING DATE

May 22, 2007

GROUP ART UNIT

3725

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION		
							YES	NO	PART.
/S.J./	1.	AR 197861	5/1974	ARGENTINA					X
/S.J./	2.	CN 1086159	5/1994	CHINA					X
/S.J./	3.	CN 2574794	9/2003	CHINA					X

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	DATE CONSIDERED	
/Stephanie Jennings/	12/14/2009	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.		

Receipt date: 11/02/2007

Sheet 1 of 1

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. 12137-0004	SERIAL NO. 10/584,271
	APPLICANT Yusuke HIRAISHI	
	FILING DATE 06/23/2006	GROUP ART UNIT 3682

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUB- CLASS	FILING DATE

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION		
							YES	NO	PART.
/S.J./	1.	2-224808	09/06/1990	Japan					x

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER	/Stephanie Jennings/	DATE CONSIDERED	12/14/2009
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

Notice of References Cited	Application/Control No. 10/584,271	Applicant(s)/Patent Under Reexamination HIRAISHI, YUSUKE	
	Examiner Stephanie Jennings	Art Unit 3725	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-3,823,599 A	07-1974	Litz et al.	73/10
*	B	US-6,330,818 B1	12-2001	Jain, Sulekh Chand	72/42
*	C	US-5,460,023	10-1995	Ginzburg, Vladimir B.	72/43
*	D	US-5,983,689	11-1999	Yorifuji et al.	72/42
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 05214358 A	08-1993	Japan	UCHIDA et al.	
	O	JP 11035967 A	02-1999	Japan	NAKANISHI et al.	
	P	JP 09292094 A	11-1997	Japan	INOUE, HIDEYUKI	
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

PAT-NO: JP405214358A
DOCUMENT-IDENTIFIER: JP 05214358 A
TITLE: LUBRICANT COMPOSITION FOR HIGH TEMPERATURE
PUBN-DATE: August 24, 1993

INVENTOR-INFORMATION:

NAME	COUNTRY
UCHIDA, HIDE	
MUTO, TAKASHI	
YAMAMOTO, HIROYASU	
ADAKA, MATSUO	

ASSIGNEE-INFORMATION:

NAME	COUNTRY
NIPPON STEEL CHEM CO LTD	N/A
NIPPON STEEL CORP	N/A

APPL-NO: JP04046389
APPL-DATE: February 3, 1992

INT-CL (IPC): C10M173/02

ABSTRACT:

PURPOSE: To obtain a lubricant composition having excellent adhesiveness to parts such as disc guide roll requiring lubrication and excellent preventing effects on seizing.

CONSTITUTION: 100 pts.wt. one or more solid lubricants selected from a group consisting of mica, titanium oxide and alkali silicate is blended with 0-500 pts.wt. water dispersion type polymer comprising a polymer and a copolymer of a vinyl compound containing a hydrophilic functional group and 60-350 pts.wt. water dissolution type polymer composed of a copolymer of a vinyl aromatic hydrocarbon and a hydrophilic functional group-containing vinyl compound or vinylidene compound to obtain the subject lubricant composition. This lubricant composition is applicable to disc guide roll, etc., used at high temperature to attain reduction in seizing, slip of steel material, bad surface of steel material and smoke.

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DERWENT-ACC- 1999-186607

NO:

DERWENT- 200233

WEEK:

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TITLE: Lubricant for hot rolling comprises aq. soln. contg. iron oxide, reduced anhydride of sodium silicate, starch or modified starch and xanthan gum

INVENTOR: NAKANISHI T; TANAKA K

PATENT-ASSIGNEE: SUMITOMO METAL IND<[SUMQ] , PALACE KAGAKU KK[PALAN]

PRIORITY-DATA: 1997JP-208626 (July 16, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
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JP 11035967 A	February 9, 1999	JA
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JP 3275255 B2	April 15, 2002	JA
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APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
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JP 11035967A	N/A	1997JP-208626	July 16, 1997
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JP 3275255B2	Previous Publ	1997JP-208626	July 16, 1997
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INT-CL-

CURRENT:

TYPE

IPC DATE

CIPP	<u>B21 B 27/10</u> 20060101
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CIPS	<u>C10 M 173/02</u> 20060101
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CIPN	<u>C10 N 10/02</u> 20060101
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CIPN	<u>C10 N 10/16</u> 20060101
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CIPN	<u>C10 N 30/06</u> 20060101
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CIPN	<u>C10 N 40/24</u> 20060101
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ABSTRACTED-PUB-NO: JP 11035967 A

BASIC-ABSTRACT:

A **lubricant** for hot rolling comprises aq. soln. contg. 10.0-40.0 pts.wt. iron oxide, 5.0-30.0 pts.wt. reduced anhydride of sodium silicate, 0.1-5.0 pts.wt. starch or modified starch and 0.01-1.0 pt.wt. xanthan gum. Also claimed is : a method for **lubricating** a horizontal **disk roll** type guide shoe the rotating axis of which is vertical to the ground, arranged on an inclined roll mill for mfg. seamless steel pipe comprises applying the liquid to the surface of the guide shoe under keeping the temp. of the shoe at 0-150 deg C using an air spray gun and also making the discharging pressure 0.2-1.5 MPa and the amount of application 50-300 g/m squared.

USE - The **lubricant** is suitably used for a **disk roll** type guide shoe of an inclined roll mill.

ADVANTAGE - The **lubricant** gives improved **lubrication** to the guide shoe without sacrificing spray applicability and enables it to produce hot mill products having improved quality.

TITLE- **LUBRICATE** HOT ROLL COMPRISE AQUEOUS SOLUTION CONTAIN IRON
TERMS: OXIDE REDUCE ANHYDRIDE SODIUM SILICATE STARCH MODIFIED
XANTHAN GUM

DERWENT-CLASS: A97 H07 M21 P51

CPI-CODES: A03-A00A; A03-C02; A10-E01; A12-W02A; H07-A; H07-F; M21-A06;

ENHANCED-POLYMER- Polymer Index [1.1] 018 ; D01 D11 D10 D23 D22 D31 D42 D50 D76 D86
INDEXING: F24 F29 F26 F34 H0293 P0599 G3623 R01863 107779; M9999 M2391;

Polymer Index [1.2] 018 ; D01 P0599 G3623 R16377 110577;

Polymer Index [1.3] 018 ; ND01; Q9999 Q7841;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: 1999-055130

Non-CPI Secondary Accession Numbers: 1999-137152

DERWENT- 1998-037959
ACC-NO:

DERWENT- 199804
WEEK:

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TITLE: Oil supply apparatus for lubricating chain, gear of vehicle includes disk like rotary member which rotates by rolling of rotary member and is accommodated in space part

INVENTOR: INOUE H

PATENT-ASSIGNEE: INOUE H[INOUE]

PRIORITY-DATA: 1996JP-127956 (April 23, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE
JP 09292094 A	November 11, 1997	JA

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 09292094A	N/A	1996JP-127956	April 23, 1996

INT-CL-
CURRENT:

TYPE	IPC DATE
CIPP	<u>F16 N 7/14</u> 20060101

ABSTRACTED-PUB-NO: JP 09292094 A

BASIC-ABSTRACT:

The apparatus (1) has a rotary member (12) twisted by transit of the vehicle (C) or the rotary body. A disk like rotary member (25) rotates by rolling of the rotary member, and is accommodated in a space (24). The centre of the disk like rotary member has a rotary shaft (22) supported to rotate the rotary member.

One end of the rotary member is connected with an oil tank (7) and another end to an outlet where oil is discharged. The midway part of the rotary member includes first, second and third tubes (8,9,30) which are positioned in space. The disk like rotary member is gradually pushed along the inner peripheral surface by the midway part of the tube so that oil is expelled from the outlet.

ADVANTAGE - Transmits transit force of vehicle to rotary member reliably. Supplies oil reliably. Adjusts amount of oil discharge according to travelling speed of vehicle and rotating speed of rotary body. Increases amount of oil discharge.

CHOSEN- Dwg.3/8
DRAWING:

TITLE-TERMS: OIL SUPPLY APPARATUS LUBRICATE CHAIN GEAR VEHICLE DISC
ROTATING MEMBER ROLL ACCOMMODATE SPACE PART

DERWENT-CLASS: Q68

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: 1998-030439